







GHG emissions 2023

To enhance the reliability of its disclosed information, the Kobayashi Pharmaceutical Group has such information assured by a third-party organization. Among the indicators listed in "GHG Emissions" below, the indicators marked with  have been assured accordingly. Going forward, we will continue to improve accuracy while effectively using the assurance of the third-party organization.

◆GHG Emissions

	Scope	Unit	FY2023	
Total of the Kobayashi Pharmaceutical Group	Scope1	kt-CO ₂	6	
	Scope2 Location Based	kt-CO ₂	23	
	Scope2 Market Based	kt-CO ₂	18	
	Scope3	kt-CO ₂ eq	Total	559
			Category 1	450

	Scope	Unit	FY2023	
Domestic	Scope1	kt-CO ₂	5	
	Scope2 Location Based	kt-CO ₂	17	
	Scope2 Market Based	kt-CO ₂	12	
	Scope3	kt-CO ₂ eq	Total*1	421
			Category 1	338 

	Scope	Unit	FY2023	
Overseas	Scope1	kt-CO ₂	1	
	Scope2 Location Based	kt-CO ₂	6	
	Scope2 Market Based	kt-CO ₂	5	
	Scope3	kt-CO ₂ eq	Total*2	138
			Category 1 (Target Third-Party Assurance*3)	31 
			Category 1 (Other Subsidiaries)	80

*The numbers may not add up because they are rounded off.

*The details of *1 and *2 are described on the following pages.

*The details of *3 is assured by a third-party organization for 1 consolidated subsidiary.

◆ Calculation Methods of GHG Emissions

Indicator	Boundary	Calculation Method
Scope1	KOBAYASHI PHARMACEUTICAL CO., LTD., all domestic consolidated subsidiaries and 11 overseas consolidated subsidiaries. However, a non-consolidated subsidiary is included in the data of GHG emissions generated from gasoline used.	GHG emissions generated from fuel used [Calculation method] Based on the “Greenhouse Gas Emissions Accounting and Reporting Manual (Ver. 4.9)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] “Greenhouse Gas Emissions Accounting and Reporting Manual (Ver. 4.9)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan
Scope2	KOBAYASHI PHARMACEUTICAL CO., LTD., all domestic consolidated subsidiaries and 11 overseas consolidated subsidiaries	GHG emissions generated from purchased electricity and heat [Calculation method] Based on the “Greenhouse Gas Emissions Accounting and Reporting Manual (Ver. 4.9)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] <ul style="list-style-type: none"> Domestic Electricity : National average emission factors and adjusted emission factors from “Emission Factors by Power Suppliers (for the calculation of GHG emissions by specified emitters) (FY 2022 results)” published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan (December 22, 2023) Overseas Electricity : Emissions Factors (FY 2021) of International Energy Agency Overseas steam : Emissions Factors from “Greenhouse Gas Emissions Accounting method and Reporting Guidelines” published by The Department of Ecology and Environment of Anhui Province
Scope3 Category 1	KOBAYASHI PHARMACEUTICAL CO., LTD., 7 domestic consolidated subsidiaries and 1 overseas consolidated subsidiary	Purchased goods and services [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG Emission Factor] <ul style="list-style-type: none"> IDEA Ver.2 of the Research Institute of Science for Safety and Sustainability, National Institute of Advanced Industrial Science and Technology As to the molding process for molded products, “Inventory Data Survey Report on Resin Processing, (Revised Version, 3rd Edition, March 2020)” published by the Plastic Waste Management Institute.

*1. Regarding Domestic Scope3 Category 2 and 3

Indicator	Boundary	Calculation Method
Scope3 Category 2	KOBAYASHI PHARMACEUTICAL CO., LTD. and all domestic consolidated subsidiaries	Capital goods [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] “The Database on Emissions Unit Values for Calculation of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)” of the Ministry of the Environment of Japan
Scope3 Category 3		Fuel- and energy-related activities not included in Scope1 and 2 [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] <ul style="list-style-type: none"> “The Database on Emissions Unit Values for Calculation of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)” of the Ministry of the Environment of Japan IDEA Ver.2 of the Research Institute of Science for Safety and Sustainability, National Institute of Advanced Industrial Science and Technology


*1. Regarding Domestic Scope3 Category 4 to 15

Indicator	Boundary	Calculation Method
Scope3 Category 4	KOBAYASHI PHARMACEUTICAL CO., LTD. and 7 domestic consolidated subsidiaries	Upstream transportation and distribution [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] ・“The Database on Emissions Unit Values for Calculation of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)” of the Ministry of the Environment of Japan ・IDEA Ver.2 of the Research Institute of Science for Safety and Sustainability, National Institute of Advanced Industrial Science and Technology
Scope3 Category 5		Waste generated in operations [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] ・“The Database on Emissions Unit Values for Calculation of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)” of the Ministry of the Environment of Japan ・IDEA Ver.2 of the Research Institute of Science for Safety and Sustainability, National Institute of Advanced Industrial Science and Technology
Scope3 Category 6	KOBAYASHI PHARMACEUTICAL CO., LTD. and all domestic consolidated subsidiaries	Business travel [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] “The Database on Emissions Unit Values for Calculation of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)” of the Ministry of the Environment of Japan
Scope3 Category 7		Employee commuting [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG emission factor] “The Database on Emissions Unit Values for Calculation of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)” of the Ministry of the Environment of Japan
Scope3 Category 9	KOBAYASHI PHARMACEUTICAL CO., LTD.	Downstream transportation and distribution [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG Emission Factor] IDEA Ver.2 of the Research Institute of Science for Safety and Sustainability, National Institute of Advanced Industrial Science and Technology
Scope3 Category 12		End of life treatment of sold products [Calculation method] Based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5)” of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan [GHG Emission Factor] IDEA Ver.2 of the Research Institute of Science for Safety and Sustainability, National Institute of Advanced Industrial Science and Technology
Scope3 Category 8, 10, 11, 13, 14 and 15	Not applicable	

*2. Overseas Scope3 values are estimated from actual domestic Scope 3 values.

Independent Assurance Report

To the President and Chief Operating Officer of KOBAYASHI PHARMACEUTICAL CO., LTD.

We were engaged by KOBAYASHI PHARMACEUTICAL CO., LTD. (the “Company”) to undertake a limited assurance engagement of the environmental performance indicators marked with  (the “Indicators”) for the period from January 1, 2023 to December 31, 2023 included in its “GHG emissions 2023” (the “Report”) for the fiscal year ended December 31, 2023.

The Company’s Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the “Company’s reporting criteria”), as described in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the ‘International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information’ and the ‘ISAE 3410, Assurance Engagements on Greenhouse Gas Statements’ issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company’s responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company’s reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company’s reporting criteria, and recalculating the Indicators.
- Visiting a Company’s domestic subsidiary selected on the basis of a risk analysis.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company’s reporting criteria as described in the Report.

Our Independence and Quality Management

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Management 1, we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

/s/ Keisuke Inoue

Keisuke Inoue, Director

KPMG AZSA Sustainability Co., Ltd.

Osaka, Japan

June 21, 2024

Notes to the Reader of Independent Assurance Report:

This is a copy of the Independent Assurance Report and the original copies are kept separately by the Company and KPMG AZSA Sustainability Co., Ltd.